## # 1. Pub/Sub to publish and receive name in ROS

1. **AIM**: To print the name via pub/sub
2. **METHOD**:

* Create catkin workspace: mkdir -p catkin\_ws/src
* Create catkin package: catkin\_create\_pkg exp0\_postlab rospy roscpp std\_msgs
* Create scripts: cd src/exp0\_postlab/src && mkdir scripts && cd scripts && touch publisher.py && touch subscriber.py
* Add the scripts in this directory
* Catkin Make: catkin\_make

## 3. **RESULT**: Successfully published and received messages via ROS’s pubsub transport

## # 2. Move the turtle bot in D shape

1. **AIM**: Move the turtlebot in a D path
2. **METHODS**:

* Create catkin package: catkin\_create\_pkg exp1\_postlab rospy roscpp std\_msgs
* Create script: cd src/exp1\_postlab/src && mkdir scripts && cd scripts && touch turtlesim\_d.py
* Add the script in this directory
* Catkin Make: catkin\_make

## 3. **RESULT**: Successfully launched a turtlebot and moved it in the D shape

## # 3. Move the turtle bot in Hexagon shape

1. **AIM**: Move the turtlebot in a Hexagon path
2. **METHODS**:

* Create catkin package: catkin\_create\_pkg exp2\_postlab rospy roscpp std\_msgs
* Create script: cd src/exp2\_postlab/src && mkdir scripts && cd scripts && touch turtlesim\_hex.py
* Add the script in this directory
* Catkin Make: catkin\_make

## 3. **RESULT**: Successfully launched a turtlebot and moved it in the hexagon shape